

From the Editor

The World's a Scary Place

In the headlines this week was news of a terror plot that was successfully thwarted. Federal agents arrested a Somali-born man as he sought to blow up a van he believed was loaded with explosives at a crowded Christmas tree lighting ceremony in Portland. This comes on the heels of other recent attempts at attacks on U.S. soil, including alleged efforts in May to set off a car bomb near Times Square or another incident last month in a bomb plot to kill commuters.

I found the image of the intended victims - families gathered to celebrate a community event - extremely disturbing. I thank God that all these recent



attempts at terrorism were unsuccessful. The question remains however, how can we protect our children and families from these horrific crimes?

Homeland security continues to be an area that continues to receive significant attention and resources. Much can be done through appropriate policy and political action and we hear stories weekly about such actions. Some measures are controversial and may result in loss of personal liberties; as a society we need to decide what is appropriate and acceptable.

Engineering and technology can also make significant contributions and I'm not sure we've moved as quickly or as robustly as we should. While there are a growing number of Homeland Security programs few seem to have an engineering and technology focus - actually none that I could identify.

IEEE sponsors a conference on Technologies for Homeland Security that provides a good starting point for identifying where engineering and technology can contribute. Significant areas include:

- Hazard detection
- Surveillance
- Cyber infrastructure security
- Risk / consequence analysis
- Data acquisition, sharing and management
- Modeling and simulation
- Communication protocol and interoperability

It's easy to see the connection to many of our traditional engineering disciplines and I know a number of universities and businesses are contributing to advancements in these area. I also believe that professional development programs can play a factor in improving our preparedness and ability to deal with the scary world we live in. I hope to see a number of programs introduced at CPDD institutions that provide both public policy-related and technology-based knowledge and skills needed to address these threats. I think we can make a difference.

Eugene Rutz, Editor
(email comments / rebuttals / kudos to eugene.rutz@uc.edu)



Chair's Corner

In mid-October, as I sat down to work on this article for the newsletter in my living room, I, fortunately, turned on the television. It was to provide 'background noise' and to give a bit of comic relief as I inevitably would be faced with a bit of writer's block.

And then, all of a sudden, I couldn't work on this article at all. I barely moved from where I was sitting.

I, along with the world, watched in amazement as the rescue of the first Chilean miner took place...successfully. And I kept watching and watching.



And as I watched, it occurred to me that this was made possible by professionals from various engineering disciplines and locations. From the knowledge of designing the chest straps which monitored the miners' vital signs, the experience of the drilling company, to the rescue cages which were specially designed to carry the miners to the surface...all involved the expertise of engineers in some way. And let's not forget the technological know-how it takes to 'bring this event to us live' using many different social media, which we take for granted nowadays.

So, being a member of the American Society for Engineering Education's Continuing Professional Development Division, we should all be reminded of how important our role is (whatever that may be) in educating professional engineers.

Nancy Kruse

CPDD Chair (2010-2012)

The University of Tulsa

Continuing Engineering & Science Education

P.S.

The CPDD Executive Board Fall Planning Meeting will be held in Tulsa. Topics of discussion will include a "Focus on Membership Drive" and creating new roles for additional opportunities for members to become involved in the division. More information on these two topics will be made available as soon as possible.

CIEC 2011

The CIEC 2011 Conference will be held February 2-4, 2011, in beautiful and warm San Antonio, Texas.

Registration is now open on the ASEE web site at

<http://www.asee.org/ciec2011>><http://www.asee.org/ciec2011>

The Conference Management team has planned 40 great sessions and several special events. You will not want to miss the EXPO Meet and Greet session sponsored by Northrop Grumman on Tuesday night, February 1, or the Gala Conference Reception, Pirates on the Riverwalk, on Wednesday night. CIP will also be hosting a special hospitality event with the Engineering Technology Division on Thursday night in the Governor's Suite. You will also have an opportunity for an additional fee to have a table for your university or corporation in the exhibit area at the EXPO and again all day Wednesday.

The plenary session will focus on the topic "Opportunities in Engineering for K-12 Students". Guest speakers will include Dr. Linda Katehi, Chancellor of the University of California, Davis; Gerald Solomon, Executive Director of the Samuelli Foundation, Broadcom, Inc.; and Dr. Ray Haynes, retired Northrop Grumman and ASEE Vice President. Dr. Ray Morrison, one of our CIP Board of Directors, will be moderating the session.

The Companion's program has been organized by Gene Morton, the Companion Program Chair. An additional special event will be a special tour of San Antonio. If you have any questions about the companion's program, contact Gene at <mailto:gemor573@gamil.com> or 573.201.3695.

You can also make your reservation at the Crown Plaza Hotel on the Riverwalk. Room rates are \$145 per night, single or double occupancy and the conference rate is good for a few days before and after the conference. Use the online reservation web site <https://resweb.passkey.com/go/IE6> and get your room at the conference rate. The deadline for the conference room block rate is January 13. Please let me know if you have any problems making your reservation.

The final program will be posted on the CIEC at <http://www.asee.org/ciec2011>. I hope to see you in San Antonio in February.

Linda Krute
2011 CIEC General Conference Chair



Kudos

Congratulations to *Keith Plemmons* who has a new role at The Citadel. Keith recently became the Director of the CSoE Division of Graduate and Professional Studies, reporting directly to Dr. Dennis Fallon, the Dean of Engineering. In this new role Keith will:

- Teach the core project management courses (two per semester)
- Coordinate with all departments concerning course offerings, schedules, changes to curriculum etc.
- Recruit and advise students in MSPM
- Develop other potential tracks (systems engineering and articulation agreements with sister institutions)
- Represent the Citadel School of Engineering on the Graduate Council
- Coordinate with the faculty of the School of Engineering to develop continuing education courses

Keith adds "My experiences with ASEE, CPDD and CIEC helped me deliver a new master degree from concept to implementation, and helped me become the director of graduate and professional studies programs under the School of Engineering. Being exposed to what others do in their classrooms and educational programs allowed me develop and deliver a very successful and well received graduate program."

Congratulations to *Nelson Baker* who provided one of ASEE's Distinguished Lecturers at the 2010 annual meeting. Nelson is Vice Provost for Distance Learning and Professional Education at the Georgia Institute of Technology. He also serves as the current president of the International Association of Continuing Engineering Education. Dr. Nelson's lecture was entitled "Engineering the

Technical Workforce for Innovation, Prosperity and Sustainability”.

Congratulations to *Eugene Rutz* for receiving the PIC V Best Paper Award for the 2009 ASEE meeting for his paper “Master Of Engineering Program As A Mechanism To Provide Relevant Graduate Education To Working Professionals”. This makes two consecutive years that Eugene received the best paper award. Eugene serves as an Academic Director in the College of Engineering & Applied Science at the University of Cincinnati.

Of Interest

Purdue - Two new Master of Science Programs for Professionals from Purdue University’s College of Technology

Organizational Leadership and Supervision

The Master of Science from Purdue with Organizational Leadership and Supervision (OLS) concentration is specifically designed to help you build the leadership skills necessary in today’s challenging business environment, and provide you with the edge needed for moving forward in your career. This unique plan of study provides a problem solving foundation coupled with leadership training in areas of teaming, interpersonal skills, organizational dynamics and human capital management.

The weekend and distance learning format has been proven to provide an environment for learning while allowing the professional to maintain the proper focus on career and family. In this 5 semester (fall, spring, summer, fall spring), 22 month program, the student will attend three on-campus weekends per semester (two in the summer) and have on-going faculty/student contact through distance learning tools. The

weekend sessions, not only provide face-to-face faculty contact, but are great networking opportunities with fellow students with similar backgrounds and challenges.

Aviation Technology

The Master of Science from Purdue with Aviation Technology concentration is designed to build leadership skills within the aviation environment. The program provides the technical statistical tools for decision making in today’s world and focuses on developing analytic and problem solving skills applicable to aviation related careers. An understanding, as well as application of the latest technology in aviation is integrated into the program. In addition, courses in organizational structure, ethics, safety, project management and interpersonal skills provide a base for handling leadership positions. During the program a capstone project, specific to the student’s interest and career, is selected and completed providing the student the chance to apply the program tools in a real-life situation.

This program is 100% distance learning to match the mobile lifestyle of many in the targeted audience; the student does not need to come the Purdue campus. The distance learning format has been proven to provide an environment for learning while allowing the professional to maintain the proper focus on career and family. The on-line classes will be offered with a flexible plan allowing the student to complete the MS degree in 5-6 semesters. With on-line offerings the student has the opportunity to fit class time and course work into his/her lifestyle.

Arizona State University – Program to Support Higher Engineering Education in Vietnam

The U.S. government is establishing a partnership that will team American

universities and the private sector in efforts to enhance the quality of engineering education at Vietnam's top technical universities.

In collaboration with the government of Vietnam, the United States Agency for International Development (USAID) is working with Arizona State University, Portland State University, and Intel Corporation as part of the new Higher Engineering Education Alliance Program valued at \$2.5 million. Intel's anticipated contribution to the program totals \$1.5 million.

"This program will result in a more highly educated and motivated faculty using cutting edge curricula," said U.S. Ambassador Michael W. Michalak. "They will train bright and successful engineers who will help Vietnam reach its rightful place in the global economy."

The three-year public-private partnership will work closely with the Ministry of Education and Training (MOET) and technical universities in Vietnam to advance their electrical and mechanical engineering curricula and instruction leading to a highly-skilled technical workforce to strengthen the emerging high-tech manufacturing industry.

"The countries that lead in innovation have these things in common: an excellent higher education system and a strong alliance between academia and industry. This is what we are working to create here, so that Vietnam will become one of the global leaders in high-tech," says Rick Howarth, General Manager of Intel Products Vietnam.

Through a selective process, ASU's Ira A. Fulton Schools of Engineering are hosting the first cohort of 25 engineering faculty for the instructional training component through August 20th, 2010. The faculties represent Hanoi University of Technology, HCMC

University of Technology, Can Tho University, HCMC University of Technical Education, and Da Nang University of Technology.

The partnership has evolved from cooperative U.S. Vietnam efforts to improve education in areas, particularly engineering, that are vital to Vietnam's economic growth.

"This project advances a strong industry-academic-government partnership model on a global stage to advance innovative workforce development collaborations," said Jeffrey Goss, Assistant Dean of Global Outreach and Extended Education, ASU Ira A Fulton Schools of Engineering and the Director of the Vietnam Higher Engineering Education Alliance Program.

The project partners will recruit and train engineering professors and students from Vietnamese universities, develop curricula, and increase collaboration between universities and industry.

ASEE Annual Conference

Make plans to join the American Society for Engineering Education in Vancouver, BC, Canada for the 118th Annual Conference & Exposition. June 26 - 29, 2011.

